This invention relates to toys. More particularly it relates to pistol simulating toys adapted to shoot rubber bands and the like.

One of the objects of our invention is to provide a toy pistol of the character described having novel means whereby a plurality of rubber bands may be loaded thereon and shot away successively one at a time.

Another object of our invention is to provide a toy pistol of the character described which shall comprise relatively few and simple parts, which shall be easy to assemble, rugged in construction, safe to use, easy to operate and at the same time highly efficient, and which shall be a general improvement in the art.

Further objects of our invention will become apparent in the following detailed description thereof.

In the accompanying drawings,

Fig. 1 is a side elevational view of a toy pistol embodying our invention;

Fig. 2 is an enlarged sectional view taken substantially on the line 2—2:

Fig. 3 is a view similar to Fig. 1 but having a portion thereof removed disclosing the interior mechanism;

Fig. 4 is an enlarged sectional view taken substantially on the line 4—4 of Fig. 3; and

Fig. 5 is an elevational view of a portion of the Fig. 1 form of device, but illustrating a modified form of construction thereof.

Referring now in detail to the drawing, there is shown a toy pistol construction embodying our invention, comprising a stock simulating portion 11, a barrel simulating portion 12 and a bullet loading simulating portion 13. While in the drawing we have illustrated one type of pistol design, it is understood that our invention contemplates any other desired firearm simulating shape or form.

By our invention, we have provided novel means whereby we are able to load the above described pistol 10 with a plurality of rubber bands, such as for example 15, 16 and 17 at one time, and which are then adapted to be successively shot away, one at a time, in a manner which will soon become apparent as the description proceeds.

The means for loading the pistol 10 with rubber bands will now be described. One end of the rubber band 15 is caused to encircle the end 12a of the barrel portion 12 and then stretched to reach and encircle the portion of rod member 20 which projects above the top of the pistol 10. Similarly the rubber band 16 is stretched and held between the end 12a and a second rod 21 spaced rearwardly of the rod 22. Also the rubber band 17 is stretched and held between the end 12a and a third rod 22 spaced rearwardly of the rod 21. To retain the rods 20, 21 and 22 in proper position, the pistol 10 is provided with a hollow chamber 30 forming an upper wall 31 and a lower wall 32. The walls 31 and 32 are provided with angularly aligned sets of upper and lower apertures 35, 36 and 37 designed to have slidably received therein the rods 20, 21 and 22. The sets of apertures 35, 36 and 37 may be non-circular in cross section, for reasons which will soon become apparent. The rods 20, 21 and 22 are of such length to normally project a predetermined distance above the upper wall 31 and below the lower wall 32. To prevent the lower ends of the rods 20, 21 and 22 from completely withdrawing upwardly from their lower wall apertures, projecting pins 38 are provided which are adapted to abut the upper wall 31. To prevent the rods 20, 21 and 22 from dropping down too far, pins 39 are provided. It is thus seen from the above described construction that the rubber bands 15, 16 and 17 will normally be retained in position as shown in Fig. 1 of the drawing.

For successively shooting off the rubber bands, we have provided the following novel construction. Each of the rods, such as for example the rod 20, is preferably constructed of metal and comprises two parts 20a and 20b pivotally joined at 20c. The part 20a is preferably of square cross section so that it may be slidably but non-rotatably retained in the apertures 35, whereas the part 20b may be of annular cross section to permit the ready dislodgement of the rubber band 15 therefrom. The relative proportion of the parts 20a and 20b is such that only the part 20a will be permitted to pivot on the axis 20c when the rod 20 is moved upwardly so that the pivot 35 is above the upper surface of the wall 31. The pivot 20c is so positioned that its axis of rotation is transversely disposed with respect to the longitudinal axis of the barrel 12 and therefore the part 20b will be permitted to rotate only in a direction toward and away from the barrel end 12a.

It is thus seen from the above described construction that when the rubber band 15 is loaded in the manner hereinbefore described and as shown in Fig. 1, and the rod 20 moved upwardly until the pivot 20c reaches a point above the top surface of the wall 31, the tension of the rubber band 15 will cause the part 20b to fold over.
as shown in Fig. 3, and the rubber band 15 will be released to be shot away. Since this action takes place suddenly, the rubber band will be shot with considerable speed.

To facilitate the raising of the rod 29, I have provided a trigger simulating member 40 which is slidable mounted in a guideway 41, in any suitable manner. One such method is illustrated in Fig. 2 of the drawing and comprises a pair of opposed notches 43 in the trigger 40 adapted to receive therein spans 43 of the guideway 41. The trigger 40 is provided with a finger gripping portion 40a projecting below the guideway 41 and with a cammed upper edge 45, the upper end thereof being disposed adjacent the lower wall 32, as shown in Fig. 3. To limit the sliding movement of the trigger in the direction of the arrow A, the guideway 41 is provided with an abutment 59. To normally retain the trigger 40 in engagement with the said abutment a suitable spring 51 is provided, one end of which is attached to the trigger 40 and the other end thereof being attached to the wall of the guideway 41.

It is now clearly seen that when the trigger 40 is slidable moved in the direction of the arrow A (Fig. 3) against the action of the spring 51, the cammed surface 45 will cause the rod 20 to rise until the pivot 20c reaches a point above the top wall 31 and the rubber band 15 will then be shot off. If the trigger 40 is continued to be moved in the direction of the arrow B, the rod 21 will be raised to shoot off the rubber band 16, and then in a similar manner the rubber band 17 will be shot off. Thus by our invention we have provided a repeating rubber band shooter. When the trigger 40 is released it will be brought back to its normal position by the spring 51 to strike the abutment 59 and be held there. Any other desirable resilient member, such as for example, a rubber band, may be employed in place of the spring 51. The pistol 10 may then be prepared for reloading by flipping the rods 20, 21 and 22 backwards so that the portions 20d will slidable fall into their apertures 35, 36 and 37 respectively.

The pistol 10 may be constructed in any known manner such as by casting the stock 11, the barrel 12 and the loading chamber 13 in one piece, providing for half of the hollow chambers 13 containing half the apertures 35, 36 and 37 in the upper and lower walls 31 and 32, and half the guideway 41. The rods 20, 21 and 22 and the trigger may then be inserted in proper position, and a cast cover member 60 screwed or riveted in place. The cover 60 is symmetrically designed with respect to the rest of the pistol 10, so that it will contain the corresponding portions of the chamber 30, the apertures 35, 36 and 37, and the guideway, as clearly shown in Fig. 2.

To insure a better gripping of the rubber bands 15, 16 and 17, and to prevent their entanglement, the edge 12a of the barrel 12 may be provided with suitable notches 61, as shown in Fig. 5 of the drawing.

While in the drawing we have shown our invention as applied to the successive shooting of three rubber bands, it is understood however that any number of rods may be employed to shoot any desired number of rubber bands.

In accordance with the provisions of the patent statutes, we have herein described the principle and operation of our invention, together with the apparatus which we now consider to represent the best embodiment thereof, but we desire to have it understood that the apparatus shown is only illustrative and that the invention can be carried out by other means. Also, while it is designed to use the various features and elements in the combination and relations described, some of these may be altered and others omitted without interfering with the more general results outlined, and the invention extends to such use.

Having described our invention, what we claim and desire to secure by Letters Patent is:

1. In a toy rubber band gun simulating a firearm the combination of a stock, a barrel, a substantially vertically disposed rod member slidably mounted in said gun, whereby a rubber band may be stretched between said rod and a point on said barrel, and saidable trigger means for quickly releasing said rubber band from said rod, said last named means including means for raising said rod member whereby to cause said rubber band to be released from said rod.

2. In a toy rubber band gun simulating a firearm the combination of a stock, a barrel, a substantially vertically disposed rod member slidably mounted in said firearm and having a portion thereof normally projecting a predetermined distance from said barrel, whereby an elastic loop may be stretched between said projecting portion and a point on said barrel, and means for quickly releasing said loop from said rod, said last named means including saidable trigger means for elevating said rod member to project still further above said top surface whereby to cause said loop to be suddenly released from said rod.

3. In a toy rubber band gun simulating a firearm the combination of a stock, a barrel, a substantially vertically disposed rod member slidably mounted member disposed transversely of said barrel, means comprising a saidable mounted trigger, adapted to slidably move saidable mounted member to automatically release the rubber band therefrom.

4. In a toy rubber band gun simulating a firearm of the character described adapted to shoot rubber bands and the like, the combination of a stock, a barrel, means for holding a rubber band in a stretched position, said means comprising a slidably mounted member disposed transversely of said barrel, means comprising a saidable mounted trigger, adapted to slidably move saidable mounted member to automatically release the rubber band therefrom.

5. In a toy rubber band gun simulating a firearm of the character described adapted to shoot rubber bands and the like, the combination of a stock, a barrel, means disposed between said stock and said barrel for holding a rubber band stretched from a point on said barrel, said means comprising a rod member, and means for shooting said rubber band, said last named means comprising a saidable mounted trigger, provided with means whereby to cause said rod member to be slidably elevated whenever said trigger is slidably moved, to thereby cause release of said rubber band from said rod.

6. In a toy rubber band gun simulating a firearm of the character described adapted to shoot rubber bands and the like, the combination of a stock, a barrel, means disposed between said stock and said barrel for normally holding one end of a rubber band stretched from a point on said barrel, said last named means comprising a substantially vertically disposed rod member slidably mounted in said firearm, and means for shooting said rubber band, said last named means comprising a slidably mounted trigger, provided with a cammed portion adapted to cause saidable movement of said rod member to release said rubber band therefrom whenever said trigger is slidably moved.

7. In a toy rubber band gun simulating a firearm of the character described adapted to shoot rubber bands and the like, the combination of a stock, a barrel, means disposed between said stock and said barrel for normally holding one end of a rubber band stretched from a point on said barrel, said last named means comprising a substantially vertically disposed rod member slidably mounted in said firearm, and means for shooting said rubber band, said last named means comprising a slidably mounted trigger, provided with a cammed portion adapted to cause saidable movement of said rod member to release said rubber band therefrom whenever said trigger is slidably moved.
arm of the character described adapted to shoot rubber bands and the like, the combination of a stock, a barrel, means disposed between said stock and said barrel for normally holding one end of a rubber band stretched from a point on said barrel, said last named means comprising a substantially vertically disposed rod member slidably mounted in said firearm, and means for shooting said rubber band, said last named means comprising a slidable mounted trigger, provided with a cammed portion adapted to cause said trigger to be released from its normal resting position, whereby relative pivotal movement of said parts, in said guideway is prevented and a slidably mounted trigger provided with a cammed portion adapted to cooperate with the lower end of said rod to slidably move said rod out of said guideway until relative pivotal movement of the said parts is permitted.

9. In a toy rubber band gun simulating a firearm of the character described adapted to shoot rubber bands and the like, the combination of a stock, a barrel, means disposed between said stock and said barrel for normally holding one end of a rubber band stretched from a point on said barrel, said last named means comprising a substantially vertically disposed rod member comprising two pivotally interconnected parts, said parts being slidably and non-rotatably housed in a guideway so that relative pivotal movement of the said parts is normally prevented, and means including a sliding trigger for moving said rod out of said guideway to permit relative pivotal movement of the parts to thereby release said rubber band end from said rod member.

10. In a toy rubber band gun simulating a firearm of the character described adapted to successively shoot a plurality of rubber bands and the like, in combination, a stock, a barrel, means disposed between said barrel and said stock for normally holding ends of a plurality of rubber bands stretched from a point on said barrel, said last named means comprising a plurality of spaced rod members, said rod members being slidably and non-rotatably mounted in said firearm, means for successively shooting said rubber bands comprising a single slidably mounted trigger, said trigger being provided with a cam whereby the sliding movement of said trigger is adapted to successively slidably move said rod members, in said guideways, said rods comprising means for automatically and successively releasing said rubber bands from said rod members after they have been slidably moved a predetermined distance by said cam.

LOUIS GAGNON.
ANGELINE GAGNON.