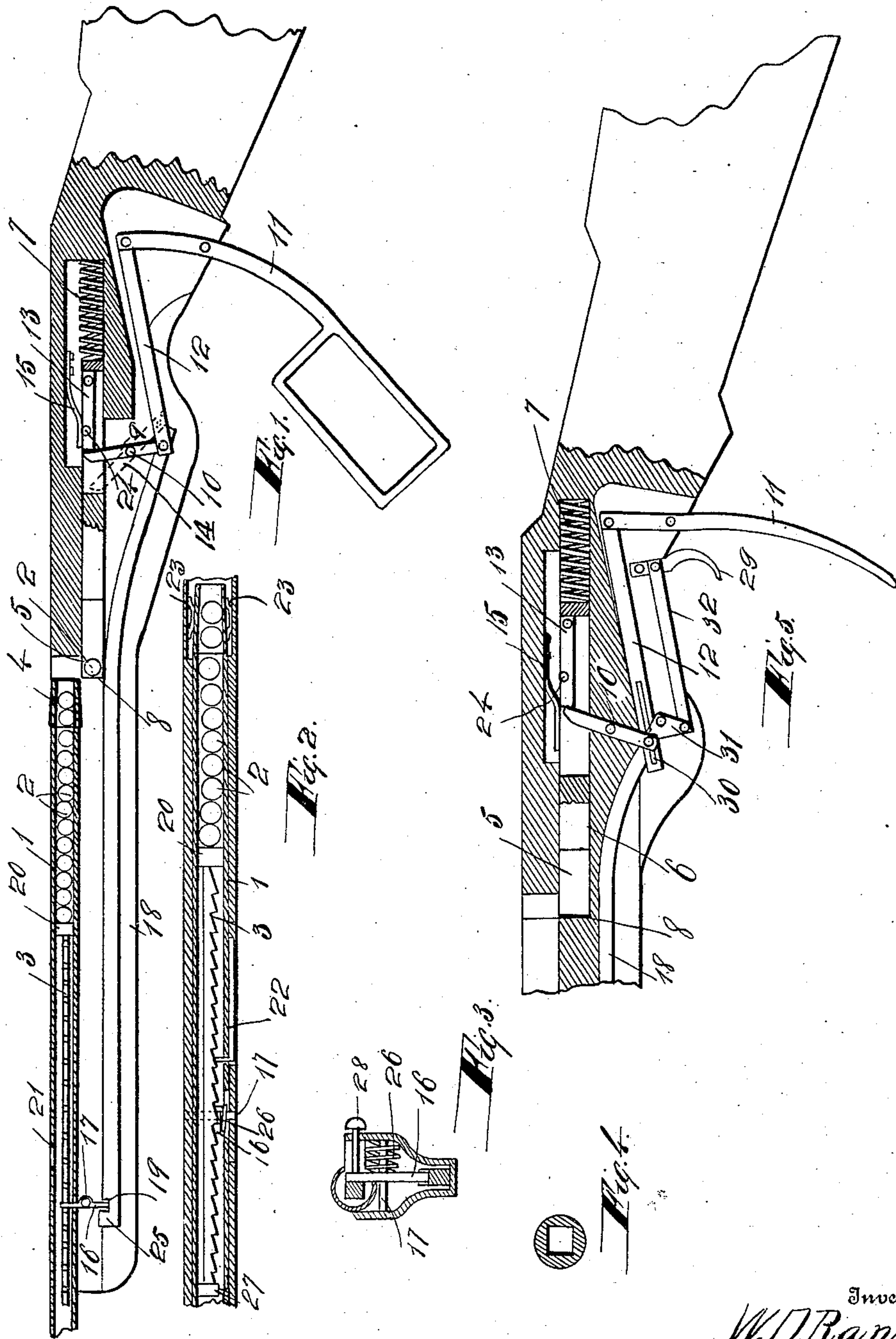


No. 883,234.

PATENTED MAR. 31, 1908.

W. D. RANEY.  
TOY MAGAZINE GUN.  
APPLICATION FILED JUNE 4, 1907.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM D. RANEY, OF FORT WORTH, TEXAS, ASSIGNOR OF ONE-HALF TO DAVID EVANS,  
OF FORT WORTH, TEXAS.

## TOY MAGAZINE-GUN.

No. 883,234.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed June 4, 1907. Serial No. 377,179.

*To all whom it may concern:*

Be it known that I, WILLIAM D. RANEY, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and Improved Toy Magazine-Gun, of which the following is a specification.

My invention relates to toy guns and more particularly to a toy gun which will contain a number of caps or balls to be exploded in succession, and the object is to produce a toy gun which will afford much pleasure and amusement, which is simple and inexpensive, and which is harmless.

Another object is to provide an automatic feed which will be actuated simultaneously with the exploding of each cap.

Other objects and advantages will be fully explained in the following description and the invention will be more particularly pointed out in the claims.

Reference is had to the accompanying drawings which form a part of this application and specification.

Figure 1 is a broken longitudinal section of the gun stock, showing in detail the working parts. Fig. 2 is a broken horizontal section of the barrel or magazine. Fig. 3 is a vertical cross-section, taken along the line  $xx$  of Fig. 1. Fig. 4 is a vertical cross-section of that part of the barrel which serves as a guide for the feeding rack. Fig. 5 is a broken sectional view, showing a trigger applied to the gun.

Similar characters of reference are used to indicate corresponding parts throughout the several views.

The gun is provided with a magazine 1 for containing caps or balls 2. The caps or balls 2 are fed or pushed along by a rack bar 3. The end of the magazine terminates with a converging spout 4 which may be made of yielding blocks. The spout must be converging so that it will be just large enough for the smallest size caps or balls and be easily yielding to let the largest balls pass. The blocks 4 are made yielding by the springs 23 which are mounted in recesses in the gun stock. When the balls 2 escape from the spout 4, they fall in a recess 5. An exploder 6 moves longitudinally in the gun stock and is actuated by a spring 7. The balls 2 are jammed against a shoulder 8 of the gun stock to cause the balls to explode. The spring 7 is compressed and the exploder

6 is retracted by a pivoted lever 9 which has a bearing pivot 10. The lever 9 is actuated by a handle 11 which is pivotally mounted on the gun stock and pivotally connected to a link bar 12 which is pivotally connected to the lever 9. The exploding bar 6 is shown partly in section in order to expose the pivoted tripping bar 13 which is mounted in a slot in the bar 6.

When the handle 11 is pressed upwards towards the stock the lever 9 will assume a position in front of the bar 13 as shown by dotted outline 14. Then on pulling the handle 11 down at the lower end, the lever 9 will press against the bar 13 and retract the head or exploder 6, compressing the spring 7 until the lever 9 goes below the end of the pivoted bar 13. The spring 7 will then throw the exploder against the ball 2. For returning the lever to the position in front of the bar 13, the bar will swing upwards on its pivot and let the lever pass in front. A spring 15 is used to adjust and hold the bar 13 in its normal position. This operation may be repeated as long as there are balls 2 in the magazine. The bar 13 is provided with lugs 24 to prevent this bar from swinging downwards through the exploding bar 6. The feeding of the balls is accomplished automatically and simultaneously with the operation of the handle 11. A feeding lever 16 is pivotally mounted on a bearing pivot 17. A bar 18 is pivotally connected to the lever 9 and to the link bar 12 and the forward end of the bar 18 has a recess cut therein which receives the end of the feeding lever 16. The end of the bar 18 which is beyond the lever 16 is wider, forming a shoulder 25 to prevent the possibility of the bar 18 failing to actuate the lever 16 when the bar is retracted. When the bar is moved forward by the handle 11 the lever 16 is actuated and moves the rack 3 one tooth and thus feeds one ball to the recess to be exploded. When the bar 18 is retracted to its normal position it moves the lever 16 to its normal position, the bar 16 passing by a tooth of the rack 3. The lever 16 is held in engagement with the rack 3 by a spiral spring 26 which is mounted on the bearing bolt 17. In order to prevent the lever 16 from moving the rack 3 forward when the lever 16 passes forward, a spring pawl 22 is attached to the magazine 1 and engages the rack and when the rack 3 is moved to feed balls the pawl 22 will ride over the teeth



and catch behind each tooth. When the magazine is to be filled with balls, the rack 3 must be moved forward. The forward part of the gun barrel is made square in cross-section, as shown in Fig. 4, and the rack has the forward end 27 shaped to conform to the interior contour of the gun barrel. This construction makes a guide for the rack 3 in its back and forth movement in the magazine 1.

When the rack 3 is to be moved forward the pawl 22 is swung upward out of engagement with the rack 3 and the lever 16 is held out of engagement with the rack by a lug or key 28 which projects through a slot in the gun stock or casing. The forward end of the gun may be turned down and the rack 3 will fall by gravity to its forward limit when the pawl 22 and the lever 16 are held out of engagement with the rack. The balls can then be dropped in the opening 21.

The gun as already described makes a complete and operative device. The lever 11 may be pulled until the ball drops into the recess 5. The working parts will stand in this position, but on a further pull of the handle 11, the lever 9 will pass below the bar 13 and the spring 7 will cause an explosion of the ball. For the purpose of making the gun more ornamental and attractive a trigger 29 may be attached. A slot 30 will then have to be made in the bar 12 so that the pulling of the handle 11 will not explode the ball. A tripping lever 31 is pivotally mounted on the gun stock to actuate the lever 9 after the ball has been fed to the recess by the pulling of the handle 11. A link bar 32 is pivotally connected to the trigger 29 and pivotally connected to the tripping lever 31. When the trigger 29 is pulled the tripping lever 31 will actuate the lever 9 in the same manner as the lever 9 would be actuated by the handle 11.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is,—

1. A toy magazine gun having a magazine, an exploding recess, an exploding bar, a lever operatively connected with said exploding bar, a handle for actuating said bar, and means actuated by the movement of said handle for feeding balls through said magazine.

2. A toy magazine gun having a magazine, a stock for said gun provided with a recess therein to receive balls from said magazine and a recess for an exploding bar, an exploding bar mounted in said recess, a lever for retracting said bar, a spring for throwing

said bar when said bar is released by said lever, a handle operatively connected with said lever, and means actuated by said handle for feeding balls through said magazine.

3. A toy magazine gun having a magazine, means for feeding balls through said magazine, a bar for exploding balls as they are fed from said magazine, said bar having a slot therein, a pivoted bar mounted in said slot, a lever for actuating said pivoted bar to retract said exploding bar, a spring for throwing said exploding bar when released by said lever, and means for actuating said lever.

4. A toy magazine gun having a magazine for containing a plurality of balls, devices for exploding balls as they are fed from said magazine, a rack, and means actuated by and simultaneously with said exploding devices for moving said rack in said magazine.

5. A toy magazine gun having a magazine for containing a plurality of balls, devices for exploding the balls, and means for feeding balls through said magazine consisting of a rack movable in said magazine, a spring pressed lever engaging said rack, and means for actuating said lever.

6. A toy magazine gun having a magazine for containing a plurality of balls, devices for exploding the balls, and means for feeding balls through said magazine consisting of a rack movable in said magazine, a guide for said rack, a spring pressed lever for engaging said rack, and means for actuating said lever.

7. A toy magazine gun having a magazine for containing a plurality of balls, devices for exploding the balls, a handle for actuating said exploding devices, and means for feeding balls through said magazine consisting of a rack movable in said magazine, a spring pressed lever engaging said rack, and a link bar connecting said lever to said handle.

8. A toy magazine gun having a magazine for containing a plurality of balls, devices for exploding the balls, and means for feeding the balls through said magazine consisting of a rack movable in said magazine, a spring pressed lever engaging said rack, a spring pawl cooperating with said rack, and means for operating said lever.

In testimony whereof, I set my hand in the presence of two witnesses, this 18th day of May, 1907.

WILLIAM D. RANEY.

Witnesses:

A. L. JACKSON,  
B. J. LOVKOWSKI.