E. J. KINGSBURY.

TOY CANNON.

APPLICATION FILED JAN. 9, 1918.

1,279,122.

Patented Sept. 17, 1918.

2 SHEETS—SHEET 1.

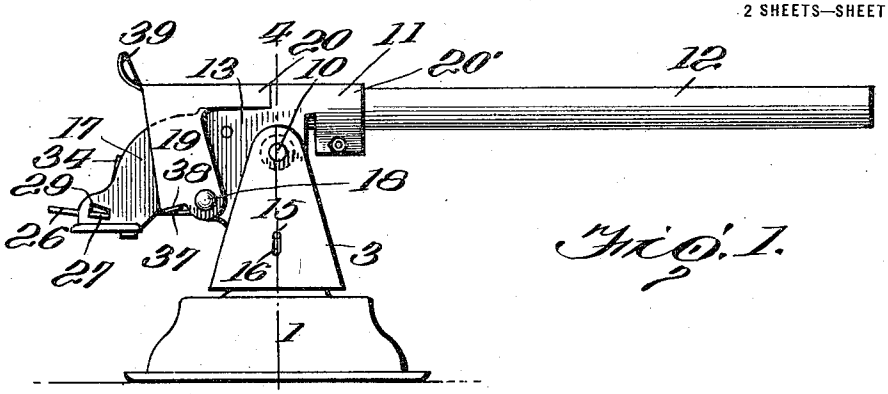

Fig. 1.

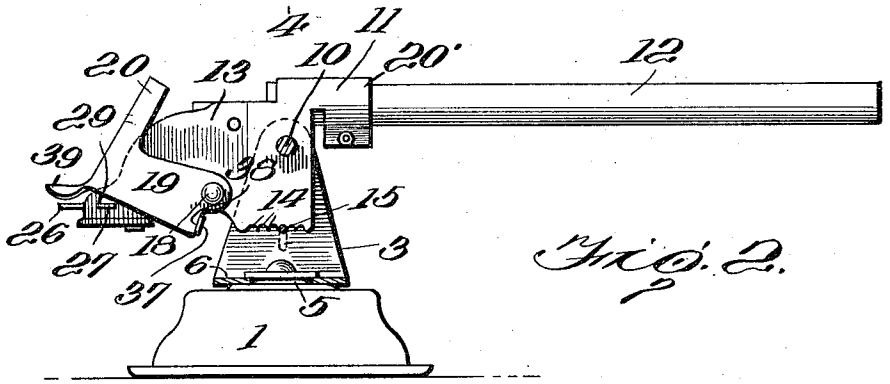

Fig. 2.

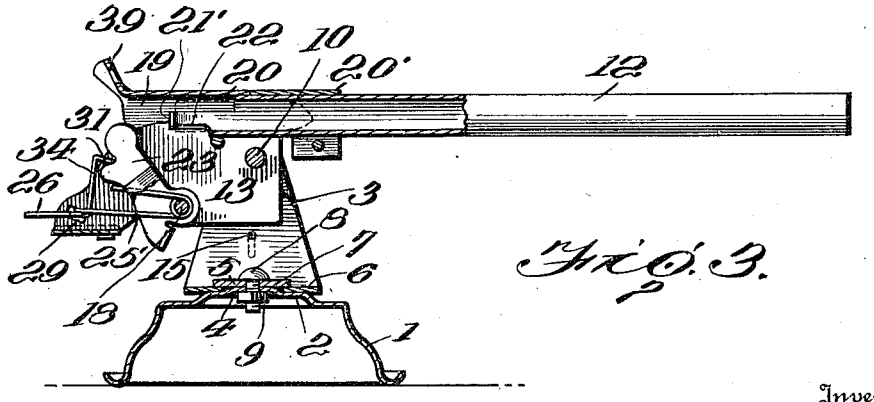

Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

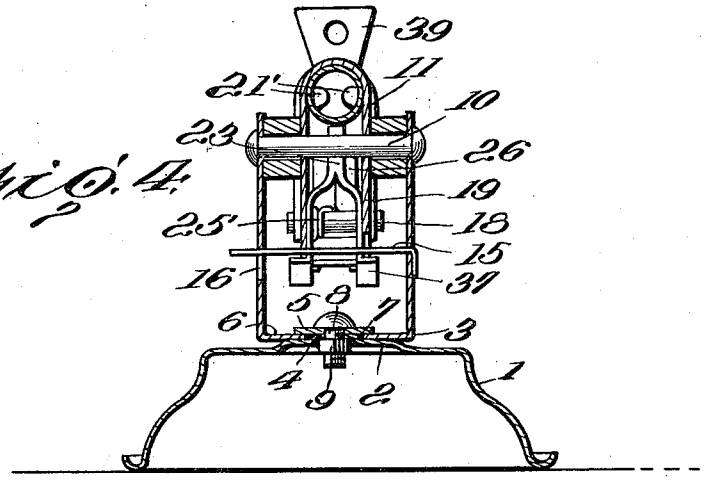


Fig. 5.

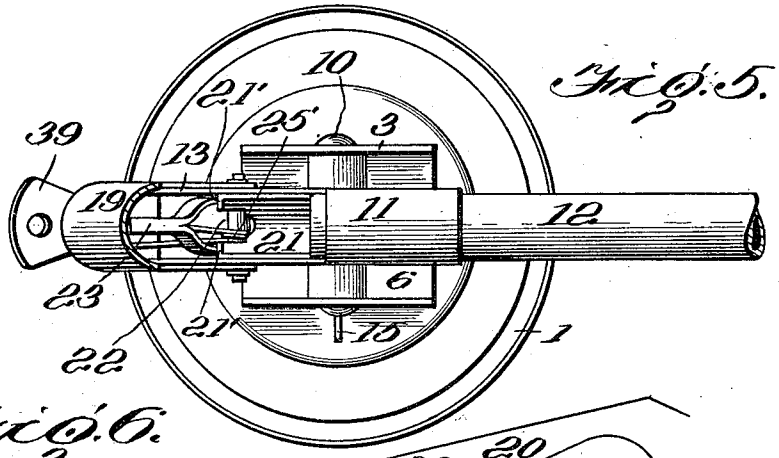
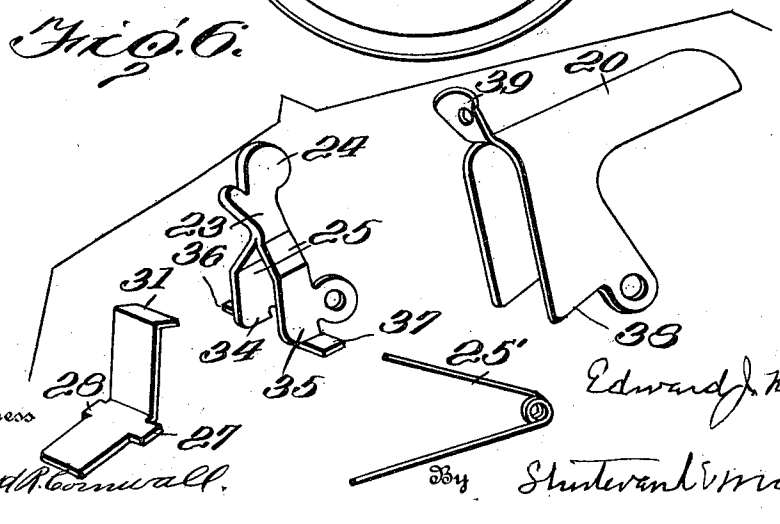


Fig. 6.



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UNITED STATES PATENT OFFICE.

EDWARD JOSLIN KINGSBURY, OF KEENE, NEW HAMPSHIRE.

TOY CANNON.

1,279,122. Specification of Letters Patent. Patented Sept. 17, 1918.

Application filed January 9, 1918. Serial No. 211,102.

To all whom it may concern:

Be it known that I, EDWARD J. KINGSBURY, a citizen of the United States, residing at Keene, in the county of Cheshire, State of New Hampshire, have invented certain new and useful Improvements in Toy Cannon, of which the following is a description, reference being had to the accompanying drawing and to the figures of reference marked thereon.

My invention relates to improvements in toy cannons.

An object of my invention is to provide a cannon of this character, which is made of sheet metal and which is adapted to have a horizontal and vertical movement whereby the same may be aimed in any direction, and at the same time providing means whereby the opening of the breech cap cocks the hammer ready for firing.

Another object of the invention is to provide a single spring for operating the hammer and for holding the trigger in engagement with the hammer for holding the same cocked.

A further object of my invention is to provide a simple, cheap and effective toy cannon having certain details of structure and combination of parts hereinafter more fully set forth.

In the accompanying drawings,—

Figure 1 is a side elevation of my improved toy cannon;

Fig. 2 is a side elevation partly broken away showing the breech cap thrown back ready to receive a projectile;

Fig. 3 is a longitudinal vertical sectional view;

Fig. 4 is a transverse sectional view taken on the line 1—1, Fig. 1;

Fig. 5 is a top plan view with the breech cap thrown back;

Fig. 6 is a perspective view of the breech cap hammer, spring and trigger in their separated relation.

Referring now to the drawings, 1 represents the base which is preferably stamped from sheet metal and of a circular form having a central upwardly pressed portion 2 forming a support for the cannon mount 3 and upon which the same is free to rotate. The portion 2 has a central upwardly pressed portion 4 which extends through an opening 5 in the flat portion 6 of the gun mount 3. Above the upwardly pressed portion 4 is a washer 7 and passing downwardly through the washer and the portion 4 is a bolt 8 having a screw-threaded lower end. Screwed upon the bolt is a nut 9 which enters the upwardly pressed portion 4 and whereby the nut is held against rotation yet the mount is free to rotate upon the base, as will be readily seen by reference to Fig. 3 of the drawings.

The gun mount 3 is of a U shape having the transverse bar 10 connecting the upper end and upon which is loosely mounted the cannon 11. The cannon is preferably made of sheet metal and comprising the barrel 12 and the breech 13, the bar 10 passing through the forward end of the breech, whereby the barrel can be elevated or lowered. In order to hold the cannon in its vertical adjustment, the breech portion 13 at its lower end is provided with corrugations 14 into which extends the spring bar 15 carried by the mount 3. This bar 15 as shown in Fig. 3 of the drawings has one end rigidly secured to one arm of the mount while the opposite end moves vertically through the slot 16 in the other arm. By this arrangement it will be seen that the corrugations will force the spring bar downwardly when undue pressure is exerted on the cannon, but the spring of said bar is sufficient to hold the cannon in its normal adjusted position.

The breech 13 as shown, has a downwardly curved rear end 17 upon which is pivotally mounted at 18 the breech cap 19 which has the forwardly extending semi-circular portion 20′ which abuts the band 20 formed as a part of the breech. This portion 20 as shown, closes the breech of the cannon after the projectile has been placed therein. The barrel 12 of the cannon has its lower rear end extending beyond the upper end, as indicated at 21 and clearly shown in Fig. 5 of the drawings. The end of this extension of the barrel has an upwardly turned portion 21′ which forms a stop to prevent the rearward movement of the projectile placed within the said extension. The said extension is provided with a slot 22 to allow the hammer to pass forward and engage the projectile for throwing it out of the cannon, as will be later fully described.

The pivot 18 of the breech cap extends entirely through the breech and pivotally mounted thereon is the hammer 23 which is composed of an upper portion 24 of a thickness to enter the slot 22. The lower end of

the hammer is bifurcated as indicated at 25—Fig. 6 and through which the pivot 18 passes. This bifurcated arrangement holds the hammer steady upon the pivot and prevents any wabbling. Wound upon the pivot 18 between bifurcated portion 25 of the hammer is a coil spring 25′, one end of which passes upwardly and engages the rear edge of the upper solid portion 24 of the hammer. Mounted in the rear end of the breech is the trigger 26, which is L-shaped and the lower horizontal portion is provided with outwardly extending lugs or ears 27 and 28 passing through slots 29 in the breech and by means of which the trigger is pivotally mounted intermediate the ends of the horizontal portion. The upper end of the vertical portion 30 of the trigger is bent downwardly at 31 to form a hook adapted to enter the notch 32 in the hammer whereby the same is held cocked. The coil spring 25′ has its opposite end 33 extending rearwardly and engages the horizontal portion of the trigger 26 forward of the pivot, whereby the upper end is held forward so that the hooked end will engage the notch in the hammer and hold it in its cocked portion.

The hammer 23 has its lower bifurcated end 25 provided with downwardly extending portions 34 and 35, which are bent outwardly at 36 and 37 below the breech and are engaged by the lower end 38 of the breech cap whereby the hammer is cocked upon the opening or rearward movement of the breech cap, as shown in Fig. 1 of the drawings. The rear upper end of the breech cap is provided with an upwardly bent portion 39 which forms a sight for the cannon and also a finger grip for opening the breech cap which in turn cocks the hammer. The trigger extends beyond the breech as shown in Fig. 1 and forms a finger hold for operating the trigger.

In operation, the mount is rotated upon the base as heretofore described, to point the cannon in the direction desired and the cannon is then cocked on the mount to get the proper elevation. The breech cap is forced rearwardly by engagement of the thumb with the finger hold, which in turn moves the hammer rearwardly by engagement thereof with the extensions 36 and 37 until the hooked end of the trigger engages the notch in the hammer and the same is held cocked. The projectile is then placed in the portion 21 with the rear end engaging the stops 21′. The breech cap is then swung forward, completely inclosing the projectile, and the hammer is released by a downward pressure on the outer end of the trigger. This allows the hammer to move forward through the slot 22 and engage the projectile and throw it from the cannon.

Claims:—

1. A cannon comprising a barrel, a breech, a hammer for projecting a projectile from the barrel, a trigger for holding the hammer cocked and a pivoted breech cap adapted to cock said hammer.

2. A cannon comprising a barrel, a breech, a hammer for projecting a projectile from the barrel, a trigger for holding the hammer cocked, and a breech cap adapted to cock said hammer upon the opening of the same.

3. A cannon, comprising a barrel, a breech, a hammer for projecting a projectile from the barrel, a trigger for holding the hammer cocked, and a horizontally pivoted breech cap adapted to cock said hammer upon the opening of the same.

4. A cannon comprising a barrel, a breech, a hammer for projecting a projectile from the barrel, a trigger for holding the hammer cocked, a single spring for operating the hammer and trigger, and a breech cap adaped to cock said hammer upon the opening of the same.

5. A cannon, comprising a barrel, a breech, a hammer within the breech for projecting a projectile from the barrel, a trigger for holding the hammer cocked, a single spring for operating the hammer and the trigger, and a pivoted breech cap adapted to engage lateral extensions carried by the hammer to cock the same upon the opening of the breech cap.

6. A cannon, comprising a barrel, a breech, a hammer within the breech for projecting a projectile from the barrel, a trigger for holding the hammer cocked, and a pivoted breech cap adapted to engage lateral extensions carried by the hammer to cock the same upon the opening of the breech cap.

7. A cannon comprising a barrel, a breech, a hammer within the breech for projecting a projectile from the barrel, a trigger for holding the hammer cocked, a single spring for operating the hammer and holding the trigger, a horizontally pivoted breech cap carried by the breech, and adapted to engage lateral extensions carried by the lower end of the hammer to cock the same upon the opening of the breech cap.

8. A cannon comprising a barrel, a breech, a transverse rod carried by the breech, a hammer pivoted on said rod within the breech and adapted to project a projectile from the barrel, a trigger within the breech for holding the hammer cocked, and having an operating portion extending beyond the breech, a single spring for operating the hammer and the trigger, a breech cap pivoted on the transverse rod on the outside of the breech and adapted to engage lateral extensions carried by the lower end of the hammer to cock the same upon the opening of the breech cap.

9. A cannon comprising a base, having an upwardly pressed portion, a mount having an opening to receive said upwardly pressed

portion, a washer above the mount, a bolt passing through the washer and the upwardly pressed portion, a nut on the bolt within the upwardly pressed portion, a breech pivoted in said mount, a barrel carried by the breech, a hammer for projecting a projectile from the barrel, a trigger for holding the hammer cocked, and a breech cap adapted to cock said hammer upon the opening of the same.

10. A cannon mount comprising a hollow base having an upwardly pressed enlarged portion with a central upwardly pressed small portion, a U-shaped mount having a horizontal lower end provided with an opening through which the small upwardly pressed portion passes, a washer above the horizontal portion of the mount, a bolt passing through the washer and the upwardly pressed portion and a nut on the bolt within the upwardly pressed portion whereby the nut and bolt are held against rotation and the mount allowed to rotate on the base.

11. A cannon comprising a barrel, a breech, a hammer within the breech for projecting a projectile from the barrel, a trigger for holding the hammer cocked, a horizontally pivoted breech cap carried by the breech and adapted to engage lateral extensions carried by the lower end of the hammer to cock the same upon the opening of the breech cap.

In testimony whereof, I affix my signature in the presence of two witnesses.

EDWARD JOSLIN KINGSBURY.

Witnesses:
L. G. LITCHFIELD,
H. D. CHANDLER.