Jan. 3, 1950 B. WAGMAN 2,493,429

TOY CANNON

Filed March 18, 1946

Fig. 7.

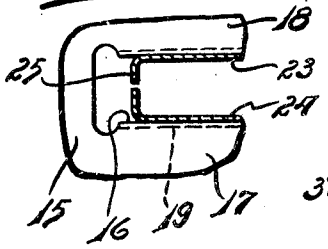


Fig. 2.

Fig. 6.

Fig. 1.

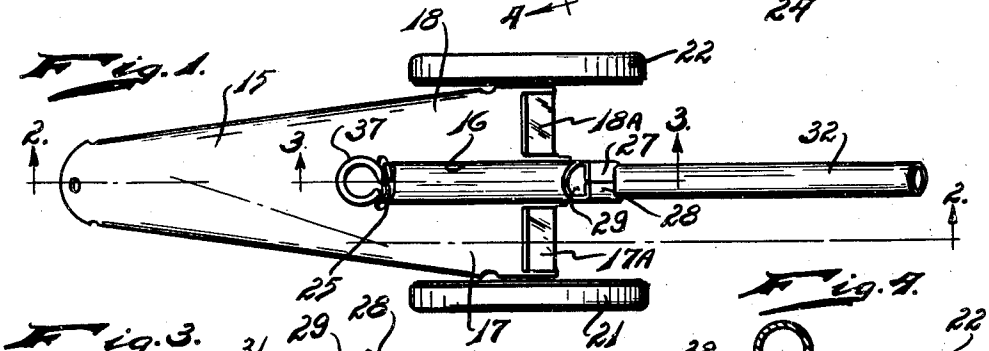


Fig. 3.

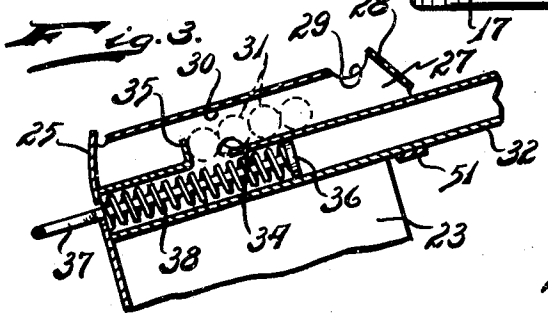


Fig. 4.

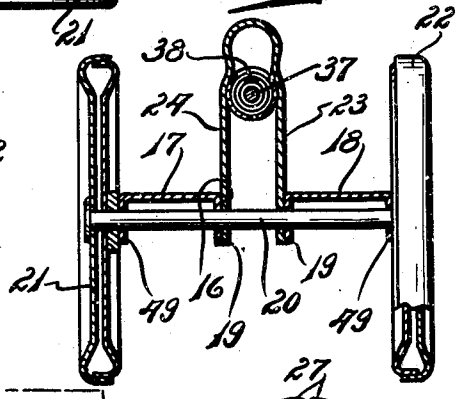


Fig. 8.

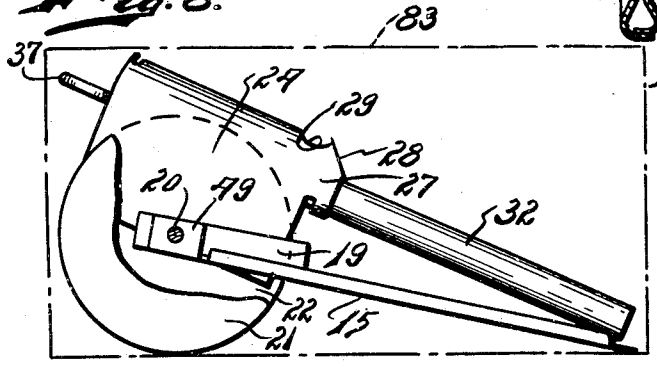
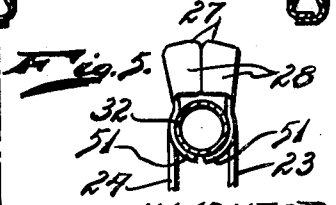


Fig. 5.



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TOY CANNON

Benjamin Wagman, Detroit, Mich.

Application March 18, 1946, Serial No. 655,207

1 Claim. (Cl. 124—29)

1

My invention relates to a new and useful improvement in a toy cannon.

It is an object of the present invention to provide a toy of this class which will be simple in structure, economical to manufacture, durable, light and capable of being folded into a compact position for packing and transportation.

It is another object of the present invention to provide a toy cannon of this class having a single shaft on which traction wheels are mounted and the various parts pivotally supported.

Other objects will appear hereinafter.

It is recognized that various modifications and changes may be made in the detail of structure illustrated without departing from the invention and it is intended that such shall be embraced within the plan which form a part hereof.

Forming a part of this application are drawings in which,

Fig. 1 is a top plan view of the invention,

Fig. 2 is a view taken on line 2—2 of Fig. 1,

Fig. 3 is a fragmentary sectional view taken on line 3—3 of Fig. 1,

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2,

Fig. 5 is a sectional view taken on line 5—5 of Fig. 2,

Fig. 6 is a fragmentary sectional view taken on line 6—6 of Fig. 2,

Fig. 7 is a fragmentary sectional view taken on line 7—7 of Fig. 2,

Fig. 8 is a side elevational view of the invention showing it folded into compact form and with parts broken away.

As shown in the drawings the invention comprises a plate 15 having an elongated slot 16 formed inwardly from one end thereof, to provide the separated parts 17 and 18 which are turned upwardly at their ends and which provide the upwardly projected shield forming portions 17*a* and 18*a*. Projecting downwardly from the outer edge each of these portions 17 and 18 is a flange 49 and projecting downwardly from the same portions 17 and 18 at the slot 16 is a flange 19 and a shaft or axle 20 is projected through all of these flanges. The flanges, therefore, serve as bearings for the shaft or axle 20 and mounted on this shaft or axle are the traction wheels 21 and 22.

A gun carriage is formed from a single sheet of metal which is doubled upon itself to provide the spaced apart plates 24 and 23 through which is projected the axle 20 so that the gun carriage is thus pivotally mounted on the axle 20. The

2

rear ends of these plates 23 and 24 are turned inwardly as at 25 to form a closure on the rear and projecting from the forward end of each of the plates 23 and 24 is a tongue 27 angularly turned as at 28 to form a closure for the forward end of the space between the plates 23 and 24. Projecting downwardly from the tongue 27 are holding tongues 51. These tongues 51 are curled around a tube 32 which forms the barrel of the toy cannon. This tube projects inwardly of the space between the plates 24 and 23 and engages at its inward end with the flanges 25. An opening 29 is cut in the bight portion of the carriage structure to permit the passage of marbles or spheres 31 therethrough into the space 30 which lies above the barrel 32. This barrel 32 is cut away as at 34 to provide an opening through which the balls 31 may individually drop, the barrel at this portion being struck upwardly to provide the abutment flange 35. Slidably mounted in the barrel 32 is a piston 36 projecting outwardly from which is the rod 37 accessible exteriorly of the flange forming portions 25 through which the rod 37 projects. This rod also projects through the coil spring 38 one end of which bears against the piston 36 and the other end of which bears against the closure forming flanges 25.

In use, a quantity of marbles or spheres 31 is deposited through the opening 29 and they will move into the position shown in dotted lines in Fig. 3. The person using the toy would then draw the piston rod 37 outwardly until the piston 36 clears the opening 34, whereupon the balls may individually drop downwardly through the opening 34 to lie in front of the piston 36. The person then releasing the piston rod 37 would permit the spring 38 to force the piston 36 into the position shown in Fig. 3, so as to expel the ball or sphere 31 outwardly through the end of the barrel 32. When one ball has been discharged, the operation would be repeated and in view of the fact that the barrel 32 is on an incline, each individual ball would, in its turn, drop through the opening 34 to be propelled by the piston 36 outwardly from the end of the barrel 32.

Experience has shown that with a toy cannon constructed in this manner, a very attractive toy is provided and one which, on account of the structure resorted to, has proven durable and highly efficient in use. The structure permits the packing of the toy into compact form as shown in Fig. 8, so that it may readily be packed into a container or carton 83, as shown in Fig. 8.

What I claim as new is:

A toy cannon of the class described, comprising: an elongated supporting plate having a longitudinally directed slot projected inwardly from one end thereof, centrally thereof, to provide a pair of separated parts; an upwardly angularly turned portion on the forward end of each of said parts to provide a shield; a gun carriage comprising a single piece of metal doubled upon itself to provide a U-shaped structure having a pair of spaced apart side plates, said plates frictionally engaging in said slot and projecting forwardly and rearwardly of said shield forming portions; a gun barrel positioned between said plates and attached thereto and projecting forwardly of the forward end thereof; longitudinally directed flanges projecting downwardly from said first mentioned plate rearwardly of said shield forming portions at opposite sides of the slot formed in said first mentioned plate, said side plates engaging, while inserted into said slot, at their outer faces, the inner faces of said flanges; a pair of traction wheels, one positioned at each side of said structure; an axle projected through said traction wheels and through said flanges and said spaced apart plates on said gun carriage for rockably mounting said gun carriage and said first mentioned plate on said axle,

the frictional engagement of said spaced apart plates in said slot and with said flanges normally resisting rocking movement of said carriage, said carriage being swingable on said axle through approximately 180° to swing said barrel to lie above said supporting plate substantially parallel thereto.

BENJAMIN WAGMAN.

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