

PATENT SPECIFICATION

364,251



Application Date: Nov. 13, 1930. No. 34,218 / 30.

Complete Left: Aug. 13, 1931.

Complete Accepted: Jan. 7, 1932.

PROVISIONAL SPECIFICATION.

Improvements in Toy Cannons.

We, FREDERICK BRITAIN, a British Subject, and BRITAINS LIMITED, a British Company, both of 28, Lambton Road, Hornsey Rise, N.19, do hereby declare the nature of this invention to be as follows:—

The purpose of this invention is to provide a toy cannon which may be used for propelling a projectile at the same time as an explosive "cap" is fired, or for either propelling the projectile without the firing of the cap or for firing the cap without propelling any projectile. A further object is to provide a toy cannon having the above convenience which resembles as closely as possible a real cannon.

According to this invention the breech of the gun is open at the back and is prolonged rearwardly below the opening to form a pallet on which a paper cap may be placed. A striker is pivoted below the pallet and is adapted to be thrown by a relatively strong spring towards the breech. The striker has a hammer surface adapted to strike the "cap" and a projecting portion adapted to strike the rear end of the projectile placed in the breech. Thus if a cap has been placed on the pallet it will be fired by the striker and or if a projectile has been placed in the

breech it will be propelled from the gun. A groove leads from the pallet to the breech so that the gases developed by the explosion of the cap will tend to drive into the breech and assist in propelling the projectile.

The spring is so anchored beneath the gun body that the striker in being set passes across the dead centre of the pull of the spring—thus the spring holds the striker in set position. A laterally pivoted lever when depressed acts on a lug on the striker to move it back across the dead centre whereupon the force of the spring acts to snap the striker into firing action.

The framework carrying the gun is provided with a slot with a series of recesses, and an arm pivoted to the gun may be made to engage in one or other of these recesses whereby the gun may be set at one or other of different elevations the values of which are preferably marked adjacent to the several recesses.

Dated this 13th day of November, 1930.

For the Applicants,
HERBERT HADDAN & Co.,
Chartered Patent Agents,
31 and 32, Bedford Street, Strand,
London, W.C.2.

COMPLETE SPECIFICATION.

Improvements in Toy Cannons.

We, FREDERICK BRITAIN, a British Subject, and BRITAINS LIMITED, a British Company, both of 28, Lambton Road, Hornsey Rise, N.19, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention relates to toy cannons adapted to propel a projectile inserted into the breech from the rear, and at the same time fire an explosive "cap" by means of a single striker, and has for its object to provide an improved construction of toy cannon of this character.

The cannon according to the invention comprises a barrel the breech of which is open at the rear for reception of a projectile, a pallet formed by a rearward prolongation of the breech below the opening of the latter, said pallet forming a seat for the "cap", a single spring-loaded pivoted striker, means whereby said striker is automatically held in retracted or "cocked" position, and a lever for releasing said striker, the latter on release striking both the "cap" and the rear end of the projectile inserted into the breech. Thus if a "cap" has been placed on the pallet it will be fired by

[Pr

the striker and "or if a projectile has been placed in the breech it will be propelled from the gun. Means are also provided whereby the gases developed by the explosion of the "cap" will assist in propelling the projectile, there being provided for this purpose a groove leading from the pallet to the breech so that the gases developed by the explosion of the "cap" will tend to drive into the breech and assist in propelling the projectile.

Further features will be described hereinafter and are specifically pointed out in the appended claims.

A toy cannon according to the invention is illustrated in the accompanying drawings, in which:—

Fig. 1 is a side view of the cannon,

Fig. 2 is a plan view thereof, and

Fig. 3 shows the opposite side of the cannon to that shown in Fig. 1.

Referring to the drawings, the breech *a* of the gun is open at the back and is prolonged rearwardly below the opening or breech bore *b* to form a pallet *c* on which a paper cap may be placed. A striker *d* is pivoted at *d*¹ below the pallet and is adapted to be thrown by a relatively strong spring *e* towards the breech. The striker *d* has a hammer surface *d*³ adapted to strike the "cap" and a projecting portion *d*² adapted to strike the rear end of the projectile placed in the breech, the projectile being, for instance, in the form of a short rod *f* designed to be introduced to the breech bore. Thus if a cap has been placed on the pallet, the latter having a recess *e*¹ for reception of the "cap", it will be fired by the striker, and/or if a projectile has been placed in the breech it will be propelled from the gun. A groove *f*¹ leads from the pallet to the breech so that the gases developed by the explosion of the cap will tend to drive into the breech and assist in propelling the projectile.

The spring *e* is so anchored beneath the gun body that the striker in being set passes across the dead centre of the pull of the spring, i.e. the point of attachment of the spring passes below the pivot *d*¹. Thus the spring holds the striker in set position as shown in Figs. 1 and 2. A laterally pivoted lever *g* when depressed acts on a lug *d*⁴ on the striker to move it back across the dead centre whereupon the force of the spring acts to snap the striker into firing action, this position of the striker being shown in Fig. 3.

The framework or carriage *h* on which the gun is pivoted is provided with a slot *h*¹ presenting a series of recesses *h*², and

an arm *i* pivoted to the gun may be made to engage in one or other of these recesses whereby the gun may be set and held at one or other of different elevations the values of which are preferably marked adjacent to the several recesses as shown.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A toy cannon comprising in combination a barrel the breech of which is open at the rear for reception of a projectile, a pallet formed by a rearward prolongation of the breech below the opening of the latter, said pallet forming a seat for a "cap", a single spring loaded pivoted striker, means whereby said striker is automatically held in "cocked" position, and a lever for releasing said striker, the latter on release striking both the "cap" and the rear end of the projectile inserted into the breech.

2. In a toy cannon as claimed in claim 1, the construction whereby the gas developed by the explosion of the "cap" will assist in propelling the projectile.

3. A toy cannon as claimed in claim 2, wherein a groove is provided leading from the pallet to the breech so that the gases will tend to drive into the breech.

4. A toy cannon as claimed in any of the preceding claims, in which the spring acting on the striker is so arranged that the latter in being set passes across the dead centre of the pull of the spring so as to hold the striker in set position, and said striker being adapted to be moved back across the dead centre by a pivoted lever adapted to be depressed, the spring then causing the striker to snap to firing position.

5. A toy cannon as claimed in any of the preceding claims, and in which the gun is pivoted on its carriage, wherein the latter is provided with a slot having a series of stepped recesses with any one of which is adapted to engage an arm pivoted to the gun, whereby the latter may be set at different elevations, substantially as described.

6. A toy cannon substantially as described and illustrated in the accompanying drawings.

Dated this 12th day of August, 1931.

For the Applicants,

HERBERT HADDAN & Co.,
Chartered Patent Agents,
31 and 32, Bedford Street, Strand,
London, W.C.2.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig:1.

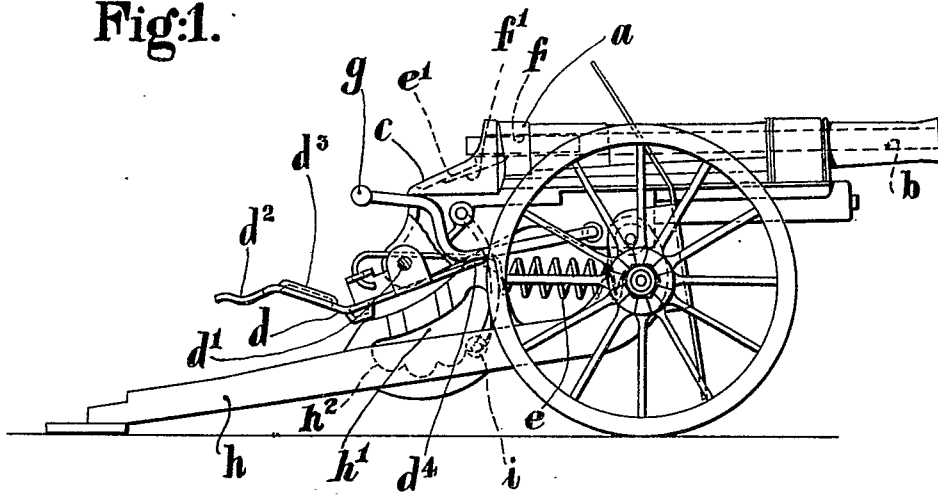


Fig:2.

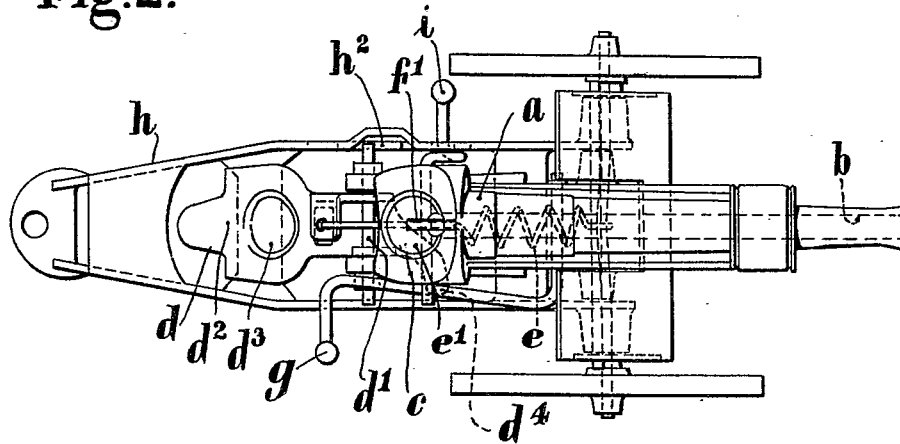


Fig:3.

