

De W. C. FARRINGTON.
LOCKS FOR MACHINE GUNS.

No. 185,510.

Patented Dec. 19, 1876.

Fig. 1.

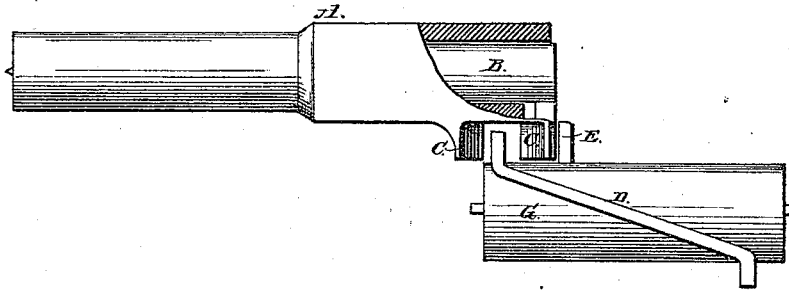


Fig. 2.

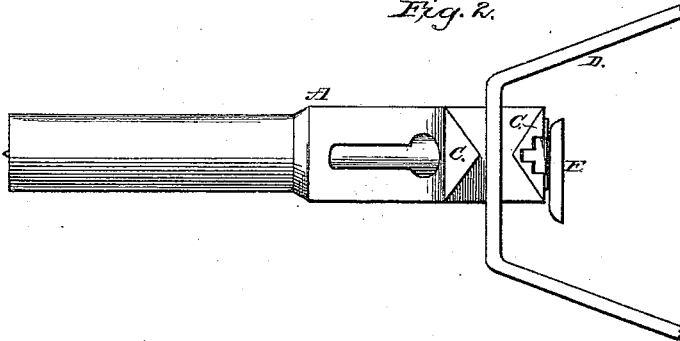
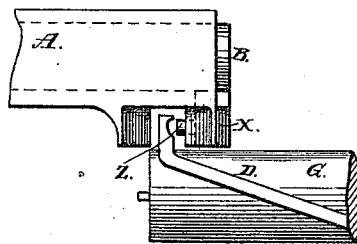


Fig. 3.



Attest:
Geo. H. Graham.
My hand.

Inventor:

De Witt C. Farrington

UNITED STATES PATENT OFFICE.

DE WITT C. FARRINGTON, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN LOCKS FOR MACHINE-GUNS.

Specification forming part of Letters Patent No. 185,510, dated December 19, 1876; application filed June 21, 1876.

To all whom it may concern:

Be it known that I, DE WITT C. FARRINGTON, of Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented new and useful Improvements in the Mechanism for Exploding Cartridges in Guns, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of this invention is to explode the primer of a cartridge by positive mechanical action rather than by a spring, which is in common use, thereby making the explosion more certain, the means less complicated, less expensive, and less liable to derangement and destruction.

Figure 1 represents a plunger or lock, having my improvements.

Letter A is the plunger, in which is a firing pin or piston, B, this firing-pin being about one-eighth of an inch longer than the plunger. C C are studs projecting from the plunger, between which a spiral cam, D, upon the cylinder G works and operates the plunger. E is another cam upon the same cylinder, which operates against the projecting part of the firing-pin.

The lock is operated as follows: The cylinder G being put in motion, the spiral cam D impinges against the front lug, and carries the plunger forward against the head of the cartridge, forcing it into the barrel of the gun. The cam D at this point makes a right angle with the plunger, and the cam E comes in contact with the piston or firing-pin B, forcing against the primer, and exploding the same. The continued motion of the cylinder

G withdraws the plunger, and allows the piston or firing-pin to be forced back by a spring or other means, ready to be again forced forward by another revolution of the cylinder G. As a means of withdrawing the firing-piston within the plane of the forward end of the plunger, I provide the same with a lug, X, which lies in a notch or recess in the rear lug c of the plunger. This lug X has a forwardly-projecting nose, Z, which moves in a groove in the straight part of the cam D, or that part opposite the cam E, but having passed said cam E the face of the cam D comes in contact with the nose Z, and forces the firing-pin back within the plunger.

It is obvious that the cam or incline for operating the firing-pin or piston, and such firing-pin or equivalent device, may be made and operated in a variety of ways without departing from the principle of my invention. And it is also manifest that the cam may be stationary and the plunger movable.

What I claim, and desire to secure by Letters Patent, is—

1. The means herein described of igniting cartridges by positive mechanical action, consisting of a firing-pin or other suitable equivalent device, and an automatically-moving cam or incline, substantially as set forth.
2. The combination of the firing-pin, the plunger, and the cam D, the parts being constructed and adapted to each other, as and for the purposes set forth.

DE WITT C. FARRINGTON.

Witnesses:

GEO. H. GRAHAM,
M. GARDNER.