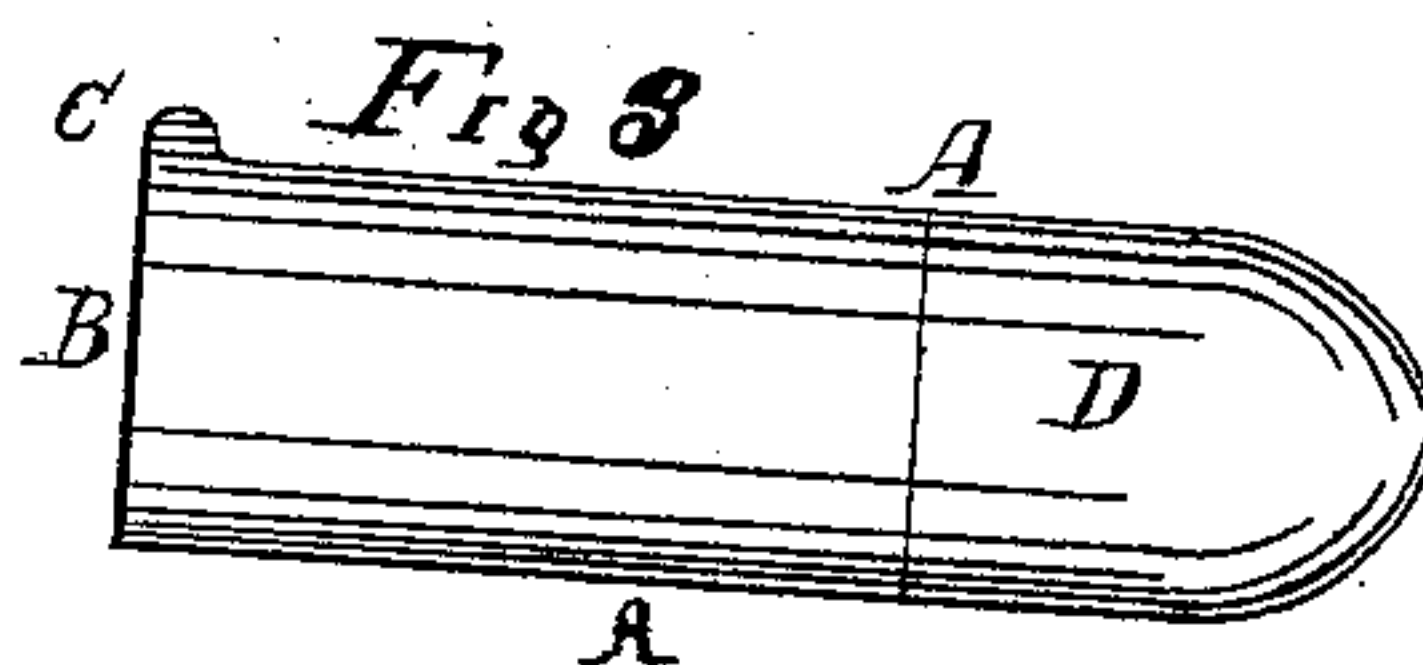
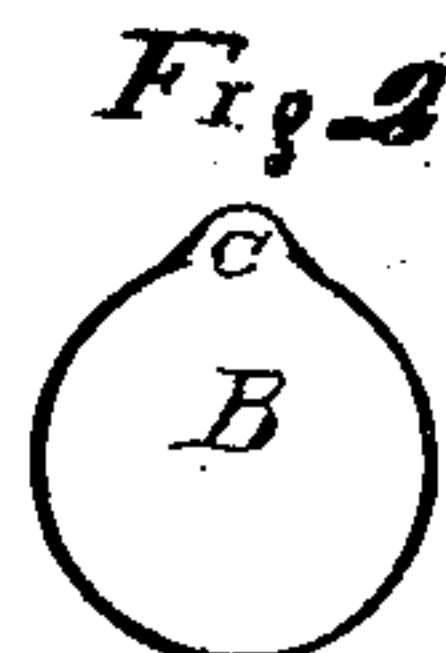
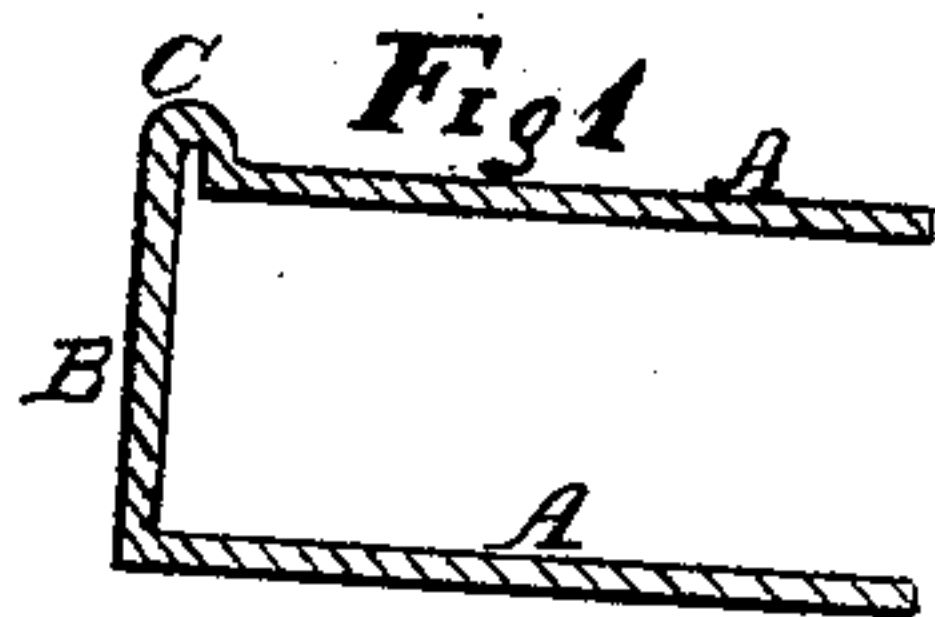


No. 30,109.

E. ALLEN.
Cartridge.

Patented Sept. 25, 1860.



Witnesses
Henry C. Wadsworth
George W. Fairfield

Inventor
Ethan Allen

UNITED STATES PATENT OFFICE.

ETHAN ALLEN, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 30,109, dated September 25, 1860.

To all whom it may concern:

Be it known that I, ETHAN ALLEN, of Worcester, in the county of Worcester, in the State of Massachusetts, have invented a new and Improved Mode of Constructing Metallic Cartridges; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and letters marked thereon, in which drawings—

Figure 1 is section through the center of a shell of a metallic cartridge; Fig. 2 is a view of the rear end of same; and Fig. 3 is a side view of a finished cartridge.

The nature of my invention consists in constructing a projection or lip on a metallic cartridge for the reception of a fulminate.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction:

A are the sides of the metallic shell; B is the rear end of the same; C is the projection or lip; and D is the bullet.

By confining the fulminate to the projection C, I thereby save about seven-eighths of the expense of this compound, and lessen the liability in the same proportion of blowing off the cartridge-end, which often occurs in exploding those in common use. I also make a stronger head, or end, to the cartridge, which obviates the difficulty of the swelling back of the head of the cartridge, as is common in other modes of construction.

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

Constructing a metallic cartridge, with a projection or lip, for the reception of the fulminate, substantially in the manner and for the purpose above set forth and described.

ETHAN ALLEN.

Witnesses:

HENRY C. WADSWORTH,
GEORGE W. FAIRFIELD.