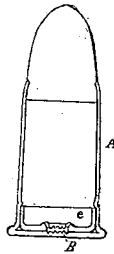


R. R. MOFFATT.  
METALLIC CARTRIDGE.

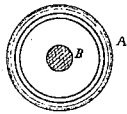
No. 110,265.

Patented Dec. 20, 1870.

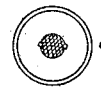
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
*Thos H. Clark*  
*Houghton Wheeler*

Inventor  
*R. R. Moffatt*

# United States Patent Office.

RICHARD R. MOFFATT, OF BROOKLYN, NEW YORK.

Letters Patent No. 110,265, dated December 20, 1870.

## IMPROVEMENT IN METALLIC CARTRIDGES.

The Schedule referred to in these Letters Patent and making part of the same.

I, RICHARD R. MOFFATT, of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Metallic Cartridges for Breech-loading Fire-Arms, of which the following is a specification.

In the drawing accompanying this specification—

Figure 1 represents a longitudinal central section of a cartridge embodying my improvement.

Figure 2 is a view looking into the cartridge-shell before it is primed.

Figure 3 represents a face view of the anvil upon which the fulminate is exploded.

Similar letters of reference in the several figures indicate like parts.

The nature of this invention consists in corrugating the inner surface of the base of a cartridge-shell, or the inner surface of an indentation made in the center of the base or head of a metallic shell, so as to prevent the fulminate from spreading when the point of the hammer or firing-pin strikes the cartridge in firing.

It also consists in corrugating the surface of the anvil which comes in contact with the fulminate, to aid in preventing the fulminate from spreading. The corrugations on the surface of the shell and anvil, which come in contact with the fulminate, not only prevents the detonating powder from spreading in priming and striking, but also insures or facilitates the firing or exploding of the priming by means of the numerous raised points or ridges of metal which are formed by corrugation.

In the annexed drawing—

A represents a metallic cartridge-shell, which is primed at the center of its base.

B is an indentation made in the center of the base of the shell A. This indentation is corrugated on its inner surface, forming numerous small ridges and grooves, which prevent the fulminate from spreading when applied in priming, and also prevent it from spreading under the force or blow of the hammer or firing-pin. It also aids or insures the firing or exploding of the fulminate.

C is a metallic anvil, which also has an indentation, with its surface corrugated for the same purpose. This anvil may be made in various shapes, such as cross-bar or flat disk, and has the surface which comes in contact with the fulminate corrugated, as represented in the drawing.

When the cartridge-shell A is primed at its corrugated surface B, the anvil C is inserted while the fulminate is wet or moist, and is crimped firmly into place. The shell is then charged with powder and ball, (or shot,) and the cartridge is ready for use when the fulminate is dry.

Having thus fully described the nature of my improvement,

I desire to secure by Letters Patent—

A cartridge with one or both faces of the priming fulminate-pocket roughened, substantially as and for the purpose set forth.

R. R. MOFFATT.

Witnesses:

J. COSTIGAN,  
J. STANHOPE WHITE.